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CLAIMS:

I. Oscillator circuitry comprising:

a capacitor;

capacitor charging means arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;

capacitor discharging means arranged to discharge the capacitor to a second predetermined threshold voltage; and

switching means arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting means which provides a voltage threshold which varies to compensate for changes in temperature.

- 2. Circuitry as claimed in claim 1, wherein the threshold setting means comprises a current source and a resistive means which varies in resistance in dependence upon temperature.
- 3. Circuitry as claimed in claim 1, wherein the switching means comprises a comparator arranged to monitor voltage across the capacitor and to trigger a change between the discharging and charging modes.
- 4. Circuitry as claimed in claim 3, wherein the comparator is connected to a first control transistor which sets the first and second predetermined threshold voltages of the capacitor.
- 5. Circuitry as claimed in claim 4, wherein the first control transistor is arranged to selectively by-pass an element of a resistive chain.

- 6. Circuitry as claimed in claim 3, wherein the comparator is connected to a second control transistor which controls current flow to facilitate charging and discharging of the capacitor means.
- 7. Circuitry as claimed in claim 2, wherein the resistive means comprises one or more diode-connected transistors.
- 8. Circuitry as claimed in claim 1, wherein the capacitor charging means comprises a current source.
- 3. Circuitry as claimed in claim 1, wherein the capacitor discharging means comprises a current source.
- 10. Oscillator circuitry comprising:
 - a capacitor;
- a capacitor charger arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;
- a capacitor discharger arranged to discharge the capacitor to a second predetermined threshold voltage; and
- a switch arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting circuitry which provides a voltage threshold which varies to compensate for changes in temperature.